

REMARKS

Favorable reconsideration of this Application, as presently amended and in light of the following discussion, is respectfully requested.

This Amendment is in response to the Office Action mailed on September 10, 2004. Claims 1-18, 26, 28, and 31-36 are pending in the Application, Claims 1-5, 7-18, 26, and 30 stand rejected, and Claims 6, 27, and 28 stand objected to as being dependent upon rejected base claims, but would be allowed if rewritten in independent form. Claims 31-35 have been allowed. The indication of allowable subject matter is noted with appreciation. Claims 1-3, 5-11, 13-15, 17, 18, 26, 28, 31, 33, 34, and 35 are amended, Claims 19-25, 27, 29, and 30 are cancelled without prejudice or disclaimer, and new Claim 36 is submitted by the present Amendment.

In view of the allowable subject matter, new independent Claim 36 recites the subject matter of Claim 6 in independent form, including the subject matter of Claim 1 as originally filed. Claim 26 has been rewritten in independent form, incorporating the subject matter of Claim 27, and intervening Claim 21, which are now canceled. Claim 28 has been rewritten in independent form, including the subject matter of Claim 21. Claims 26, 28, and 36 are believed to be in condition for allowance.

Summarizing the outstanding Office Action, the title of Applicants invention was objected to for being non-descriptive. Claims 1-2, 4-5, 7-11, 13-15, and 18-19 were rejected under 35 U.S.C. §102(b) as being anticipated by Nakajima et al. (U.S. Patent No. 5,753,907, hereinafter “Nakajima”). Claims 21 and 25-26 were rejected under 35 U.S.C. §102(b) as being anticipated by Arimoto (U.S. Patent No. 5,053,619, hereinafter “Arimoto”). Claims 3, 16-17, and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Andrews et al. (U.S. Patent No. 5,493,326, hereinafter “Andrews”). Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakajima in view of Hayashi et

al. (U.S. Patent No. 6,081,386, hereinafter “Hayashi”). Claims 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Arimoto in view of Kanayama et al. (U.S. Patent No. 5,047,789, hereinafter “Kanayama”). Claims 29 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Arimoto in view of Andrews.

In response to the objection of Applicants’ title, Applicants have herein submitted a revised title to comply with that objection and respectfully request reconsideration of the same.

As to the anticipation rejection of Claims 1, 2, 4, 5, 7-11, 13-15, 18, and 19 in view of Nakajima, Applicants respectfully submit that Claims 1, 13, and 18 are not anticipated by Nakajima because each and every element as set forth in that claim is not found, either expressly or inherently described, in the cited reference. In an anticipation rejection, MPEP § 2131 requires that the identical invention must be shown in as complete detail as is contained in the claim.

Independent Claims 1 and 13 now recite a liquid crystal element configured to deflect a light beam. As presently amended, Claims 1 and 13 are not anticipated by Nakajima because this reference has been acknowledged as failing to teach or disclose a liquid crystal device used as a deflecting unit.<sup>1</sup> Likewise, Claims 2, 4, 5, 7-11 and Claims 14 and 15 also patently distinguish over Nakajima at least because of their dependency from Claims 1 and 13, respectively.

Claim 18 now recites an adjusting unit provided between a scanning unit and a scanned face to compensate for the curvature of a scan line. Nakajima relates to an invention to adjust the pitch of a scanning line.<sup>2</sup> As such, Claim 18 patently distinguishes over Nakajima. In addition, Claim 19, incorporating by reference the subject matter of Claim 18, is also not anticipated by Nakajima.

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<sup>1</sup> See, Outstanding Office Action, page 5, item 6.

<sup>2</sup> See, for example, Nakajima, col. 1, lines 43-50; col. 5, lines 28-30; and col. 5, lines 33-36.

Based at least on the foregoing discussion, Applicants respectfully request that the anticipation of Claims 1, 2, 4, 5, 7-11, 13-15, 18, and 19 under 35 U.S.C. § 102(b) in view of Nakajima be withdrawn.

As to the anticipation rejection of Claims 21, 25, and 26 in view of Arimoto, please note that Claims 21 and 25 have been canceled and Claim 26 amended with the allowable subject matter of Claim 27 and intervening Claim 21. As such, this rejection is now moot, its withdrawal being respectfully requested.

As to the obviousness rejection of Claims 3, 16, 17, and 20 in view of Nakajima and Andrews, Applicants respectfully submit that these references, neither individually nor in any combination thereof, support a *prima facie* case of obviousness of the invention recited in Claims 1 and 13. This is so because, even when combined, these references do not teach or suggest all the claimed features. Please note that Claim 20 is now canceled, making moot its outstanding rejection.

Claims 1 and 13 now recite a liquid crystal element provided between a light source and a polygon mirror. Claim 3 depends from Claim 1 and Claims 16 and 17 depend from Claim 13. In the outstanding Office Action Nakajima has been acknowledged as failing to disclose a liquid crystal device and Andrews has been cited for disclosing an imaging forming apparatus comprising an optical component formed by a liquid crystal.

However, Andrews discloses the use of an optical element 50 “provided and disposed in the post-scan optics, subsequent to polygon 16.”<sup>3</sup> This optical element 50, which “preferably includes a liquid crystal cell containing a liquid crystal material,”<sup>4</sup> although “shown at a position located between the magnification lens 18 and the imaging member 2[,]” . . . “may be disposed between the F-theta correction lens 17 and the magnification lens

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<sup>3</sup> See, Andrews, col. 7, lines 35 and 36.

<sup>4</sup> *Id.*, lines 50-52.

18 or between the rotating polygon 10 and the F-theta correction lens 17.”<sup>5</sup> In addition, Andrews specifically teaches that “[p]lacement of the optical element 50 in the post-scan optics is required for manipulating the entire scan line through the optical element 50 to provide proper alignment on the imaging member 2.”<sup>6</sup> The liquid crystal element in Claims 1 and 13 are recited as being between the light source and the polygon mirror. As such, the combination of Nakajima and Andrews does not make obvious the invention recited in Claims 1 and 13.

Thus, based at least on the above-summarized discussion, Applicants respectfully request that the rejection of Claims 16 and 17 under 35 U.S.C. § 103(a) based on the combination of Nakajima and Andrews be withdrawn.

As to the obviousness rejection of Claim 12 under 35 U.S.C. § 103(a) based on the combination of Nakajima and Hayashi, Applicants respectfully submit that these references, neither individually nor in any combination thereof, support a *prima facie* case of obviousness of the invention recited in Claim 1. This is so because, even when combined, these references do not teach or suggest all the claimed features.

The inappropriateness of Nakajima as a prior art reference applied to Claim 1 has already been discussed. In addition, Nakajima was further acknowledged as failing to teach a resin lens provided in the optical path from a light source to a scanned faced. Hayashi, having been cited simply for teaching and disclosing a non-spherical scanning lens made of plastic, does not remedy the deficiencies of Nakajima as already discussed. Therefore, Nakajima and Hayashi, neither individually nor in any combination thereof, make obvious the invention recited in Claim 12. For the foregoing remarks, Applicants respectfully request withdrawal of this rejection of Claim 12 under 35 U.S.C. § 103(a).

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<sup>5</sup> *Id.*, lines 39-46.

<sup>6</sup> *Id.*, lines 46-49, emphasis added.

As to the remaining obviousness rejection of Claims 22-24 over the combination of Arimoto and Kanayama and of Claims 29 and 30 over the combination of Arimoto and Andrews, Claims 22-24, 29, and 30 have been canceled, thus making these rejections now moot. Their withdrawal is respectfully requested.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-18, 26, 28, and 31-36 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representatives at the below listed telephone number.

Respectfully submitted,

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